

TAG Programmers Job Aid
BellSouth Ordering Guide for CLECs
Product and Service Interval Guide
High Speed Data Service Order Entry Gateway Systems (SOEG) Network Service Provider User Guide
Resale Activation Requirements

**Table V-5: Test Target: EDI, TAG, and Manual Resale and xDSL Order Documentation Evaluation**

Process Area	Sub-Process	Evaluation Measure
Acquire Documentation	Receive current documentation	Availability and timeliness of documentation
Evaluate Documentation	Evaluate documentation format	Organization of documentation
	Evaluate EDI Interface Documentation	Usability, comprehensiveness, and accuracy of documentation
	<u>Evaluate LEO-IG Documentation</u>	<u>Usability, comprehensiveness, and accuracy of documentation</u>
	Evaluate TAG Interface Documentation	Usability, comprehensiveness, and accuracy of documentation
	Evaluate xDSL Manual Ordering Documentatoin	Usability, comprehensiveness, and accuracy of documentation

#### 4.5 Test Approach

KPMG will use operational analysis techniques to evaluate BLS's documentation. Prior to the initiation of the test, evaluation checklists will be created to facilitate a structured review of documentation based on standard criteria set forth in the MTP. KPMG will perform a structured review of BLS documentation, visit the BLS Interconnection Web site, and verify the accuracy of documentation during live tests of BLS EDI, and TAG, and SOEG systems, as well as manual ordering processes. The documentation review conducted during live testing will allow for evaluation of the usefulness of the documentation in a business environment.

##### 4.5.1 Inputs

1. Documentation pertaining to EDI, TAG, SOEG, and manual ordering for xDSL products
2. Log of all documentation issues uncovered during provisioning activities
3. Detailed operational test plan and task checklist
4. Interview questionnaire for BLS and CLEC personnel
5. Documentation evaluation checklist

##### 4.5.2 Activities

1. Conduct documentation evaluation of each document using the documentation evaluation checklist

2. Conduct documentation interviews with BLS documentation specialists and CLEC documentation users
3. Compile results and create summary reports

#### 4.5.3 Outputs

1. Variance between actual test performance and the standards of performance defined in BLS methods and procedures
2. Report of expected results versus actual results
3. Report of unexpected documentation errors categorized by type of problem
4. Completed interview reports
5. Summary Report

#### 4.6 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

### 5.0 Test O&P15: xDSL Manual Order Processing Evaluation

#### 5.1 Description

The Manual Order Processing Functional Test will evaluate the functional elements of the ordering and provisioning process for xDSL products as delivered to CLECs by the manual ordering process. This test cycle will be executed by submitting local service requests (LSRs) for xDSL products against BLS test bed accounts and allowing the process to continue through the return of either a firm order confirmation (FOC) or reject/error notice. A number of these transactions will be permitted to proceed through the physical provisioning process and the return of a faxed completion notice (CN). This test cycle will address all manually ordered loops capable of xDSL requisition type and activity type combinations for business and residence customers. Other functional elements of the xDSL ordering and provisioning process to be tested include full and partial migrations, error conditions, order supplements, directory listings, cancels, dispatch and non-dispatch provisioning, expedites, service order status inquiries, and jeopardy notices delivered through the manual interfaces.

Orders will be submitted as both stand alone transactions and as integrated pre-order /order transactions. Note that although all of the transactions to order xDSL products will be submitted manually, the related pre orders will be submitted electronically or manually, depending on the information required. For a defined set of integrated transactions, information returned on the pre-order response will be used to populate

fields on subsequent orders. This activity is undertaken to simulate the system-related activities of a CLEC wishing to integrate the pre-order and order functions.

The manual ordering and provisioning tests will require BLS to establish a test bed of customer accounts against which to place the requisite service requests. Customer test accounts will be distributed geographically across multiple Georgia Central Offices and switching/transmission equipment configurations.

## 5.2 Objective

The objective of the Manual Order Processing Test is to measure BLS's capability to meet agreed-upon functionality and measures of service for ordering and provisioning, and to evaluate the existence of manual ordering functionality for xDSL products in accordance with BLS documentation.

## 5.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
All documentation pertaining to Manual Order processing pertaining to xDSL obtained	BLS
Identification of Manual Ordering data entry/response tracking techniques completed	KPMG
BLS measurements available at the CLEC level	BLS
Test bed data bases and facilities in place and CSR's provisioned	BLS
Test Scenarios selected	KPMG
Identify CLEC participants in order to utilize xDSL capabilities	KPMG, CLEC(s)
Specific Test Cases and expected results developed	KPMG
Detailed "Go/No Go" checklist created	KPMG
Specific Evaluation techniques developed	KPMG
Successful completion of QA/SRT testing	BLS, KPMG
Test Case execution schedule developed	KPMG
Test Plan and evaluation criteria defined and approved	KPMG
Test execution team staffed, scheduled, and trained	KPMG

## 5.4 Test Scope

The table below outlines the processes and sub-processes involved in evaluating BLS's Manual Ordering functionality and performance. CLEC participation may be required in order to test xDSL functionality.

**Table V-6: Test Target: xDSL Manual Order Processing Evaluation**

Submit an Order	Create order transaction(s).	Accessibility of fax interface
	Submit Local Service Request (LSR).	Presence of functionality for manual processing
	Receive acknowledgment.	Presence of Response
	Receive Firm Order Confirmation (FOC)/error/reject notification.	Timeliness of Response
	Submit expedited order transaction.	Accuracy and completeness of response.
Submit an Error	Create error transaction(s).	Timeliness of response

Table V-6: Test Target: xDSL Manual Order Processing Evaluation

Process Area	Test Case	Test Target
		Accuracy of response Clarity and completeness of error message
	Receive acknowledgment.	Timeliness of response Accuracy and completeness of error message.
	Receive planned error/reject notification.	Timeliness of response Accuracy of response Clarity and completeness of error message
	Correct error(s).	Timeliness of response Accuracy of response
	Re-send integrated LSR.	Accessibility of fax interface
	Receive FOG.	Timeliness of response Accuracy of response
Supplement an Order	Create supplement transaction(s).	Presence of functionality
	Submit supplement.	Presence of functionality Timeliness of response Accuracy of response
	Receive acknowledgment.	Timeliness of response Accuracy of response
	Receive FOG/error/reject notification.	Timeliness of response Accuracy of response Clarity and completeness of error message
	Correct error(s).	Timeliness of response Accuracy of response
	Re-send supplement.	Presence of functionality for manual processing
	Receive FOG.	Timeliness of response Accuracy of response
	Receive CN transaction.	Timeliness of response Accuracy of response
Receive Completion Notice (CN)		
Receive Pending Facility Status	Receive pending facility (PF) notification.	Timeliness of response Accuracy of response
Receive Jeopardy Notification	Receive jeopardy notification transaction.	Timeliness of response Accuracy and completeness of response
Check Service Order Status	Check service order status.	Accuracy of response

### 5.5 Test Approach

KPMG will utilize various manually ordered xDSL transaction test cases and test instances developed based on the ordering and provisioning test case scenarios. The objective of this test is to validate the accuracy and completeness of manually processed orders to BLS for ordering transaction requests and response.

#### 5.5.1 Inputs

- 1.xDSL test cases for manual ordering
- 2.Test case execution schedule
- 3.Manual order handling methods and procedures
- 4.BLS documentation

- ~~5. Trained personnel to execute test cases~~
- ~~6. Test "Go / No Go" checklist~~
- ~~7. Detailed operational test plan~~

#### 5.5.2 Activities

- ~~1. Use test cases to develop transactions and transaction content based upon instructions provided in the appropriate documentation~~
- ~~2. Submit manually ordered test case transactions for Ordering according to schedule. (CLEC participation may be required)~~
- ~~3. Match transaction response to original transaction. Verify that matching transaction can be found and record mismatches~~
- ~~4. Verify that transaction response contains expected data and flag non-expected errors~~
- ~~5. Manually review non-expected errors. Identify error source (KPMG or BLS). Identify and log reason for the error. Determine if test should be discontinued~~
- ~~6. Correct expected errors. Re-submittal date, time, and appropriate information are logged~~
- ~~7. Identify transactions for which responses have not been received. Where multiple responses are expected for the same request, the receipt of each response will be monitored. Record missing responses~~
- ~~8. Log documentation issues uncovered during transactions creation and submission process~~
- ~~9. Review status of pending orders. Verify and record accuracy of response~~
- ~~10. Jeopardy, Pending Facilities Status, and delay notifications are recognized and logged. Any jeopardy or delay notifications not received electronically are logged using the jeopardy/delay notification log~~
- ~~11. Verify correct provisioning on a sampling of orders that have been completed. Record results in appropriate provisioning log and activity checklist~~
- ~~12. Generate reports~~

**5.5.3 Outputs**

1. ~~Variance between actual test performance and the standards of performance defined in BLS methods and procedures~~
2. ~~Report of expected results versus actual results~~
3. ~~Rejects received after confirmation notification and percentage of total~~
4. ~~Report of unexpected errors categorized by type of problem~~
5. ~~Transaction counts, error ratio, response time, etc. by transaction type, product family and delivery method~~
6. ~~Minimum, maximum, mean, average, and aggregate response time/interval per transaction set~~
7. ~~Transaction counts per response time/interval range per transaction set~~
8. ~~Orders erred after initial confirmation~~
9. ~~Completed jeopardy / delay notification logs~~
10. ~~Summary Report~~

**5.6 Exit Criteria**

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

**6.0 Test O&P16: Capacity Management Evaluation – xDSL****6.1 Description**

The xDSL Order Processing Capacity Management Evaluation will assess the scalability of the manual processes for xDSL orders. This evaluation will include a detailed review of the safeguards and procedures in place to plan for and manage projected growth in the capacity of the manual processes and associated workforce.

**6.2 Objective**

The objective of this evaluation is to determine the extent to which procedures to accommodate increases in wholesale xDSL orders are being actively managed.

**6.3 Entrance Criteria**

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Interview guides/questionnaire developed	KPMG
Interviewees identified and scheduled	BLS, KPMG
Detailed evaluation checklists completed	KPMG

## 6.4 Test Scope

The table below outlines the processes and sub-processes involved in evaluating the management processes and capabilities of BLS to support capacity changes in the order processes associated with xDSL products.

**Table V-7: Test Target: O&P Capacity Management Evaluation**

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
xDSL Order Processing Capacity Management	Data collection and reporting of business volumes, resource utilization, and performance monitoring	Adequacy and completeness of data collection and reporting	Inspection Interviews	Qualitative
	Data verification and analysis of business volumes, resource utilization, and performance monitoring	Adequacy and completeness of data verification and analysis	Inspection Interviews	Qualitative
	Workforce and Capacity Planning	Adequacy and completeness of workforce and capacity planning	Inspection Interviews	Qualitative

## 6.5 Scenarios

Scenarios are not used in this test.

## 6.6 Test Approach

The evaluation of Capacity Management for the manual processes begins with a review of the work center procedural documentation and interviews with center personnel to collect information about the processing of xDSL orders. A structured center walk-through and direct observation of personnel performing their daily work will supplement the planned test interviews and document reviews. Business transaction volume and forecast data will be gathered in order to assess current and future workload. Process models will be developed to assess the capacity and scalability of the manual processes. Work force planning procedures and staffing plans will be evaluated through additional interviews and documentation reviews.

### 6.6.1 Inputs

- 1.xDSL manual ordering and related system documentation
- 2.Capacity management evaluation checklist
- 3.Interview guides

## 4. Personnel to perform evaluation

## 6.6.2 Activities

1. Review procedural and other documentation related to xDSL ordering processing
2. Conduct interviews with key work center personnel as appropriate
3. Document findings

## 6.6.3 Outputs

1. Completed capacity management evaluation checklist
2. Interview summaries
3. Summary findings and conclusions

## 6.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

## 5.0 Test PO&amp;P15: Work Center Capacity Management Evaluation - xDSL

## 5.1 Description

The Work Center Capacity Management Evaluation will assess the scalability of BLS's manual processes for xDSL (Digital Subscriber Line) pre-order and order processing. This evaluation will include a detailed review of the safeguards and procedures in place to plan for and manage projected growth in the capacity of the manual processes and associated workforce.

## 5.2 Objective

The objective of this evaluation is to determine the extent to which procedures to accommodate increases in wholesale xDSL orders are being actively managed.

## 5.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Interview guides/questionnaire developed	KPMG
Interviewees identified and scheduled	BLS, KPMG
Availability of documentation identified as input	BLS, KPMG
Detailed evaluation checklists completed	KPMG

## 5.4 Test Scope

The table below outlines the processes and sub-processes involved in evaluating BLS's management processes and capabilities to support capacity changes in the pre-order and order processes associated with xDSL products.



**Table V-6: Test Target: PO&P Work Center Capacity Management Evaluation**

<u>Process Area</u>	<u>Sub-Process</u>	<u>Evaluation Measure</u>	<u>Evaluation Technique</u>	<u>Criteria Type</u>
<u>xDSL Pre-Order and Order Processing Capacity Management</u>	<u>Data collection and reporting of business volumes, resource utilization, and performance monitoring</u>	<u>Adequacy and completeness of data collection and reporting</u>	<u>Inspection</u> <u>Document Review</u>	<u>Qualitative</u>
	<u>Data verification and analysis of business volumes, resource utilization, and performance monitoring</u>	<u>Adequacy and completeness of data verification and analysis</u>	<u>Inspection</u> <u>Document Review</u>	<u>Qualitative</u>
	<u>Workforce and Capacity Planning</u>	<u>Adequacy and completeness of workforce and capacity planning</u>	<u>Inspection</u> <u>Document Review</u>	<u>Qualitative</u>

### **5.5 Scenarios**

Scenarios are not used in this test.

### **5.6 Test Approach**

The evaluation of Capacity Management for the manual processes begins with a review of the work center procedural documentation and interviews with work center personnel to collect information about the processing of xDSL orders. Structured center walk-throughs and direct observation of personnel performing their daily work will supplement the planned test interviews and document reviews. Business transaction volume and forecast data will be gathered in order to assess current and future workload. Process models will be developed to assess the capacity and scalability of the manual processes. Work force planning procedures and staffing plans will be evaluated through additional interviews and documentation reviews.

#### **5.6.1 Inputs**

1. xDSL pre-order and order process documentation
2. Staffing and capacity planning process documentation
3. Capacity management evaluation checklist
4. Interview guides
5. Personnel to perform evaluation

**5.6.2 Activities**

1. Review procedural and other documentation related to xDSL pre-order and ordering processing
2. Review procedural documentation related to staffing and capacity planning
3. Conduct center walk-throughs, observations and interviews with key work center personnel, as appropriate
4. Document findings

**5.6.3 Outputs**

1. Completed capacity management evaluation checklist
2. Interview summaries
3. Summary findings and conclusions

**5.7 Exit Criteria**

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

**6.0 Test PO&P16: ADSL Systems Capacity Management Evaluation****6.1 Description**

The ADSL (Asymmetric Digital Subscriber Line) Systems Capacity Management Evaluation is a detailed review of the safeguards and procedures in place to plan for and manage projected growth in the use of the High Speed Data Service Order Entry Gateway (SOEG) System.

**6.2 Objective**

The objective of this evaluation is to determine the extent to which BLS's procedures to accommodate increases in the ADSL interface transaction volumes and users are being actively managed.

**6.3 Entrance Criteria**

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Interview guides/questionnaire developed	KPMG
Interviewees identified and scheduled	BLS, KPMG
Availability of documentation identified as input	BLS, KPMG
Detailed evaluation checklists completed	KPMG

**6.4 Test Scope**

The table below outlines the processes and sub-processes involved in evaluating BLS's management processes and capabilities to support capacity changes in ADSL orders.

**Table V-7: Test Target: PO&P16 ADSL Systems Capacity Management Evaluation**

<u>Process Area</u>	<u>Sub-Process</u>	<u>Evaluation Measure</u>	<u>Evaluation Technique</u>	<u>Criteria Type</u>
<u>ADSL System Capacity Management</u>	<u>Data collection and reporting of business volumes, resource utilization, and performance monitoring</u>	<u>Adequacy and completeness of data collection and reporting</u>	<u>Inspection Document Review</u>	<u>Qualitative</u>
	<u>Data verification and analysis of business volumes, resource utilization, and performance monitoring</u>	<u>Adequacy and completeness of data verification and analysis</u>	<u>Inspection Document Review</u>	<u>Qualitative</u>
	<u>System and Capacity Planning</u>	<u>Adequacy and completeness of system and capacity planning</u>	<u>Inspection Document Review</u>	<u>Qualitative</u>

**6.5 Scenarios**

Scenarios are not applicable to this test.

**6.6 Test Approach**

Interviews will be conducted with key system administration personnel responsible for the operation of the SOEG system. These interviews will be supplemented with an analysis of BLS capacity management procedures as well as evidence of related activities such as: periodic capacity management reviews; system reconfiguration/load balancing; and load increase induced upgrades.

**6.6.1 Inputs**

1. SOEG system technical documentation
2. Capacity Management process documentation
3. Capacity management evaluation checklist
4. Interview guides
5. Personnel to perform evaluation

**6.6.2 Activities**

1. Review procedural and other documentation related to SOEG system capacity management
2. Review system technical documentation

3. Conduct interviews with key system administration personnel
4. Document findings

#### 6.6.3 Outputs

1. Completed capacity management evaluation checklist
2. Interview summaries
3. Summary findings and conclusions

#### 6.7 Exit Criteria

<u>Criteria</u>	<u>Responsible Party</u>
Limited to Global Exit Criteria requirements	See Table III-4

### 7.0 Test PO&P17: xDSL Process Parity Evaluation

#### 7.1 Description

The xDSL (Digital Subscriber Line) Process Parity Evaluation is a review of the processes, systems, and interfaces that provide pre-order, order, and provisioning for CLEC and Reseller xDSL orders. The review will focus on these areas:

- Pre-Order and Order interfaces
- Workflow definitions
- Workforce scheduling
- Facility administration
- Service activation
- Test and acceptance
- Exception handling
- Completion notices

Operational analysis techniques will be used to evaluate BLS's systems and processes for parity with corresponding Retail functions for xDSL. It will consist of targeted interviews of key development and process-owner personnel along with structured reviews of process, system, and interface documentation. Structured center walk-throughs, interviews with center personnel and direct observation of personnel performing their daily work will supplement the development and process-owner interviews and documentation reviews.

## 7.2 Objective

The objective of this evaluation is to determine the degree to which the pre-order, order and provisioning environment supporting CLEC xDSL orders is on parity with BLS's retail environment.

## 7.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria	See Table III-3
Detailed xDSL Process Parity Evaluation Checklist developed	KPMG
Pre-order, order and provisioning process documentation available	BLS
Technical platforms specifications available	BLS
Databases specifications available	BLS
Data communications and interfaces specifications available	BLS
Interview guide/questionnaire developed	KPMG
Interviewees identified and schedule developed	BLS, KPMG

## 7.4 Test Scope

The table below outlines the processes and sub-processes involved in evaluating parity for BLS's processes for pre-order, order and provisioning of xDSL products.

**Table V-8: Test Target: PO&P17 xDSL Process Parity Evaluation**

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
xDSL Pre-order	xDSL Service Inquiry	Comparable processes between wholesale and retail	Inspection Document Review	Parity
	xDSL Loop Qualification	Comparable processes between wholesale and retail	Inspection Document Review	Parity
xDSL Ordering	xDSL Order Submission	Comparable processes between wholesale and retail	Inspection Document Review	Parity
	xDSL Order Entry	Comparable processes between wholesale and retail	Inspection Document Review	Parity

<u>Process Area</u>	<u>Sub-Process</u>	<u>Evaluation Measure</u>	<u>Evaluation Technique</u>	<u>Criteria Type</u>
<u>xDSL Provisioning</u>	<u>xDSL Workflow Management</u>	<u>Comparable processes between wholesale and retail</u>	<u>Inspection Document Review</u>	<u>Parity</u>
	<u>xDSL Workforce Management</u>	<u>Comparable processes between wholesale and retail</u>	<u>Inspection Document Review</u>	<u>Parity</u>
	<u>xDSL Facilities Assignment</u>	<u>Comparable processes between wholesale and retail</u>	<u>Inspection Document Review</u>	<u>Parity</u>
	<u>xDSL Service Activation</u>	<u>Comparable processes between wholesale and retail</u>	<u>Inspection Document Review</u>	<u>Parity</u>

### 7.5 Scenarios

Scenarios are not applicable to this test.

### 7.6 Test Approach

#### 7.6.1 Inputs

1. xDSL Pre-order, Order and Provisioning process documentation
2. Interview guide/questionnaire
3. Interviewees (per process area)
  - xDSL process owners
  - xDSL process staff
4. Interview schedule
5. Detailed xDSL Process Parity Evaluation Checklist
6. Appropriate system documentation

#### 7.6.2 Activities

1. Identify all process documentation needed for review.
2. Identify relevant systems and interfaces.
3. Identify all system documentation available for review.
4. Conduct structured review of documentation using xDSL Process Parity Evaluation Checklist.
5. Conduct center walk-throughs, interviews and direct process observations using the interview guides and questionnaires.

6. Inspect physical systems and communications environments.

7. Document findings.

#### 7.6.3 Outputs

1. Completed xDSL Process Parity Evaluation Checklist

3. Interview summaries

4. Summary findings and conclusions

#### 7.7 Exit Criteria

<u>Criteria</u>	<u>Responsible Party</u>
<u>All global exit criteria</u>	<u>See Table III-4</u>

## VI. Maintenance and Repair Test Section

### A. Purpose

The purpose of this section is to define the specific tests to be undertaken in evaluating the equivalence of BLS's end-to-end processes for retail and wholesale trouble reporting and repairs of xDSL lines, as well as to test TAFI and ECTA functionality on resale lines. These tests are in addition to the initial maintenance and repair tests as described in the *BellSouth – Georgia OSS Evaluation Master Test Plan*, which are as follows:

- M&R-1: TAFI Functional Test
- M&R-2: ECTA Functional Test
- M&R-3: ECTA Normal Volume Performance Test
- M&R-4: ECTA Peak Volume Performance Test
- M&R-5: TAFI Capacity Management Evaluation
- M&R-6: ECTA Capacity Management Evaluation
- M&R-7: M&R Performance Results Comparison
- M&R-8: TAFI Documentation
- M&R-9: ECTA Documentation
- M&R-10: M&R Process Evaluation

### B. Organization

The Maintenance and Repair Scope section contains a series of tables that identify the specific tests to be associated with each target test area. The tables are organized based upon subject test matter.

The Maintenance and Repair "Test Process" section provides additional information and tables that further define the testing approach, inputs, outputs, as well as entrance and exit criteria.

### C. Scope

The Maintenance and Repair test family is comprised of two test target areas, representing important and generally distinct areas of effort undertaken by BLS. These two test target areas are:

- Performance
- Functionality



Each target test area is further broken down into a number of increasingly discrete Process and Sub Process Areas that serve to identify the particular area of interest under test.

#### D. Test Process

Three tests have been designed to address the two test target areas. The organization of the subject test processes is as follows:

M&R 11: Maintenance & Repair Process Evaluation of xDSL-Capable Loops

M&R 12: TAFI Functional Test of Resale Lines

M&R 13: ECTA Functional Test of Resale Lines

This section contains the specific evaluations to be performed in this analysis of BLS's maintenance and repair operations in support of Resale and xDSL services.

#### *1.0 Test M&R11: Maintenance and Repair Process Evaluation of xDSL Capable Loops*

##### 1.1 Description

The test is comprised of two sub-tests. The first, Sub-Test 1, evaluates the functional equivalence of BLS's maintenance and repair processes for wholesale and retail xDSL trouble reports. Process flows for wholesale and retail trouble management will be reviewed and evaluated along with technician methods and procedures (M&P's) and job aids for wholesale trouble repair. The second element, Sub-Test 2, involves the execution and observation of selected maintenance and repair test scenarios involving xDSL to evaluate BLS's performance in making repairs under the conditions of various wholesale maintenance scenarios.

##### 1.2 Objectives

The objective of Sub-Test 1 is to evaluate the equivalence of BLS's end-to-end processes for retail and wholesale trouble reporting and repair for xDSL lines. The objective of Sub-Test 2 is to evaluate BLS's performance in making repairs to xDSL lines under conditions of various wholesale maintenance scenarios.

##### 1.3.1 Entrance Criteria for Sub-Test 1

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Retail and wholesale process flow documentation available	BLS
Retail and wholesale technician job aids (e.g., M&P's) available	BLS
Process evaluation checklists	KPMG

## 1.3.2 Entrance Criteria for Sub-Test 2

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Global entrance criteria have been satisfied	See Table III-3
Test scenarios selected	KPMG
Product descriptions and business rules for all transactions to be tested are available.	BST
Test-bed circuits provisioned	BST
Faults inserted into test-bed circuits as required by the test scenarios	KPMG

## 1.4 Test Scope

*Table VI-1 Test Target: Maintenance and Repair Process Evaluation of xDSL-Capable Loops*

Process Area	Sub Process/Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
End-to-End M&R Process: xDSL	Process Flow Documentation	Comparison with Retail	Inspection	Parity
	Process Evaluation	Completeness, consistency, and timeliness of the process	Inspection	Qualitative Parity
End-to-End Trouble Report Processing: xDSL	M&R Test Scenarios	Accuracy Timeliness	Inspection	Quantitative Parity

## 1.5 Scenarios

This test involves the execution and observation of selected maintenance and repair test scenarios involving xDSL products to evaluate BLS's performance in making repairs.

## 1.6 Test Approach

## 1.6.1 Inputs

1. Retail and wholesale M&R process flow documentation (xDSL)
2. Other BLS procedural documentation
3. Test bed circuits with embedded faults
4. Trouble interface availability
5. BLS procedural and technical documentation
6. Evaluation checklists
7. Interview guides
8. Detailed operational test plan

**1.6.2.1 Activities for Sub-Test 1**

1. Review and compare wholesale and retail process flows.
2. Identify differences between the two processes.
3. Analyze process.
4. Assess the potential impact of each difference if possible.
5. Document process analysis results.

**1.6.2.2 Activities for Sub-Test 2**

1. Conduct circuit test if applicable for each test ID.
2. Note test results.
3. Create and submit trouble tickets via TAFI, ECTA or call-in to the BRMC.
4. Periodically monitor each trouble report throughout its life.
5. Note significant events in the trouble report life cycle (error occurrences, corrections, trouble ticket submission time, time cleared, etc.)
6. Calculate time to repair measurements for each test scenario fault repaired.
7. Document observations.

**1.6.3 Outputs**

1. Completed evaluation checklists and interview summaries
2. Summary report

**1.7 Exit Criteria**

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

**2.0 Test M&R12: TAFI Functional Test of Resale Lines****2.1 Description**

The TAFI (Trouble Analysis Facilitation Interface) Functional Test will evaluate the functional elements of the trouble reporting and screening process for resale services as delivered to CLECs via the TAFI interface in BLS's production environment. This test will be executed by exercising a defined set of TAFI functions associated with trouble management activities against test bed accounts.

## 2.2 Objectives

The objective of the TAFI Functional Test is to validate the existence of TAFI trouble reporting and screening functionality for resale service customers in accordance with the CLEC TAFI End User Training and User Guide.

## 2.3. Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Detailed Test Plan completed	KPMG
Test Scenarios selected	KPMG
Specific Test Cases and Transaction Sets developed	KPMG
Product descriptions and business rules for all transactions to be tested available	BLS
Basic documentation review completed	KPMG
Detailed functional checklist created	KPMG
Test bed of working services selected and/or established	BLS
Security access to TAFI established	BLS
Evaluation Criteria defined and approved	GAPSC
Checklists and Interview Guides created	KPMG

## 2.4 Test Scope

*Table VI-2 Test Target: TAFI Functional Test of Resale Lines*

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Trouble Reporting	Create/Enter Trouble Report (TR)	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Modify TR	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Close/Cancel TR	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Retrieve TR Status	Functionality exists as documented	Inspection	Existence Qualitative Parity
Trouble History Access	Retrieve Trouble History	Functionality exists as documented	Inspection	Existence Qualitative Parity
Access To Test Capability	Receive MLT Test Results	Functionality exists as documented	Inspection	Existence Qualitative Parity

## 2.5 Scenarios

This test involves the execution and observation of selected maintenance and repair test scenarios involving resale lines and features.

## 2.6 Test Approach

### 2.6.1 Inputs

1. Test cases
2. Documentation (TAFI End User Guide)
3. Functionality checklists
4. Interview guides
5. Personnel to execute test cases
6. Detailed operational test plan

### 2.6.2. Activities

1. Use test cases created for this test and appropriate BLS documentation to perform each of the functions listed on the checklist provided via the TAFI interface.
2. Verify that each system function behaves as documented.
3. Note any anomalies in the space provided on the checklist.
4. Note any discrepancies between TAFI documentation and behavior.
5. Ensure that all trouble reports entered in TAFI have been canceled.
6. Use the checklist and interview guide to conduct interviews with BLS personnel selected from the Residence and Business M&R work centers.
7. Observe BLS personnel trouble report activities as identified on the checklist provided.
8. Note the presence and behavior of functions identified on the checklist.
9. Document results and findings.

### 2.6.3 Outputs

1. Completed evaluation checklists and interview summaries
2. Summary report

## 2.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

**3.0 Test M&R13: ECTA Functional Test of Resale Lines****3.1 Description**

The ECTA Functional Test will evaluate the functional elements of the trouble reporting and screening process for resale services as delivered to CLECs via the ECTA interface. This test will be executed by exercising a defined set of ECTA functions associated with trouble management activities against test bed accounts.

**3.2 Objectives**

The objective of the ECTA Functional Test is to validate the existence of ECTA trouble reporting and screening functionality for resale service customers in accordance with BLS's published specifications.

**3.3 Entrance Criteria**

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Detailed Test Plan completed	KPMG
Test Scenarios selected	KPMG
Specific Test Cases and Transaction Sets developed	KPMG
Product descriptions and business rules for all transactions to be tested available	BLS
Basic documentation review completed	KPMG
Detailed functional checklist created	KPMG
Test bed of working services selected and/or established	BLS
Physical access to BellSouth Trouble entry site established	BLS
Security access to ECTA established	BLS
Evaluation Criteria defined and approved	GAPSC
Checklists and Interview Guides created	KPMG

**3.4 Test Scope****Table VI-3 Test Target: ECTA Functional Test of Resale Lines**

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Trouble Reporting	Create/Enter Trouble Report (TR)	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Modify TR	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Close/Cancel TR	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Retrieve TR Status	Functionality exists as documented	Inspection	Existence Qualitative Parity
Trouble History Access	Retrieve Trouble History	Functionality exists as documented	Inspection	Existence Qualitative Parity

Process Area	Sub-Process	Evaluation Measure	Evaluation Technique	Criteria Type
Access To Test Capability	Initiate MLT Test	Functionality exists as documented	Inspection	Existence Qualitative Parity
	Receive MLT Test Results	Functionality exists as documented	Inspection	Existence Qualitative Parity

### 3.5 Scenarios

This test involves the execution and observation of selected maintenance and repair test scenarios involving resale lines and features.

### 3.6 Test Approach

#### 3.6.1 Inputs

1. Test cases
2. BLS documentation
3. Functionality checklists
4. Personnel to execute test cases

#### 3.6.2 Activities

1. Use test cases created for this test and appropriate BLS documentation to perform each of the functions listed on the checklist provided via the ECTA interface.
2. Verify that each system function behaves as documented.
3. Note any anomalies in the space provided on the checklist.
4. Note any discrepancies between M&R trouble entry documentation and behavior of the ECTA interface.
5. Ensure that all trouble reports entered via the ECTA interface have been cancelled.
6. Document results and findings.

#### 3.6.3 Outputs

1. Completed evaluation checklists and interview summaries
2. Summary report

### 3.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

## VII. Billing Test Section

### A. Purpose

The purpose of this section is to define the specific tests to be undertaken in evaluating the billing and message processing operational elements associated with BLS's support of Resale products and services. Additional billing tests are described in the *BellSouth - Georgia OSS Evaluation Master Test Plan*, as follows:

- BLG-1: CRIS/CABS Invoicing Functional Test
- BLG-2: ODUF/ADUF Usage Functional Test
- BLG-3: Billing Systems Capacity Management Evaluation
- BLG-4: Billing Performance Results Comparison
- BLG-5: CRIS/CABS Invoicing Documentation Evaluation
- BLG-6: ODUF/ADUF Documentation Evaluation

### B. Organization

The Billing tests are comprised of the following two test target areas:

- Bill Invoicing
- Usage Processing

Each test target area is broken down into a number of process and sub-process areas, described in sections 1.4 and 2.4. These test target areas delineate particular areas of interest to be assessed in evaluating the effectiveness of BLS's procedures as they relate to the production and delivery of Resale bills and Daily Optional Usage Files.

### C. Scope

The purpose of this section is to identify the depth and breadth activities, service types, and line configurations that will be included in the test. KPMG will create test scenarios to ensure coverage of the electronically orderable services from the top 50 resale services that do not have significant commercial volume, based on analysis defined in Appendix B. Order activity will include the following service requests:

- New Install
- Inside Move
- Outside Move
- Suspend
- Restore



- Conversion to new LSP
- Add/Change features
- Change telephone
- Add line

#### D. Test Process

This section contains the specific evaluations to be performed in the analysis of application of rates and charges, and the assembly, recording, and delivery of usage associated with BLS's Resale products and services.

#### 1.0 Test BLG7: CRIS Resale Invoicing Functional Evaluation

##### 1.1 Description

The CRIS Resale Invoicing Functional Test will evaluate BLS's ability to accurately bill functional billing elements associated with Resale products. The test will be executed in conjunction with orders submitted during the execution of the EDI and TAG Functional Evaluations and usage generated during the execution of the Resale Usage Functional Test. These tests are detailed in Section V, 1.0, Section V, 2.0, and Section VII, 2.0 of this STP.

KPMG will examine the functional billing elements of CRIS Resale bills resulting from completed order transactions on test accounts for resale products and services. Functional billing elements include measured and flat rate services, monthly recurring and non-recurring charges, pro-rations, adjustments, late payment, and usage charges. The test will also look at bill formats across all billing service delivery methods to evaluate completeness and readability of each format.

##### 1.2 Objectives

The objectives of this test are to determine the adequacy, accuracy, and timeliness of BLS's billing and invoicing procedures associated with Resale products.

##### 1.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
All CRIS baseline bills produced from the initial test bed	BLS
Techniques and instrumentation developed and approved	KPMG
Test bed matches requirements	BLS
Product descriptions and business rules for all transactions to be tested are available	BLS
Test bed completed and ready	BLS
Method for viewing bills implemented	BLS, KPMG
Inter-Connection Agreement obtained from BLS	BLS, KPMG
Availability of BSL resources to test and produce CRIS bills	BLS

Criteria	Responsible Party
Calls made during Functional Usage Evaluation processed through to the DUF and available for billing	BLS

## 1.4 Test Scope

Table VII-1 Test Target: Bill Invoicing

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Billing Accuracy	Verify recurring charges	Accuracy completeness of rates and quantity	Inspection	Quantitative
	Verify non-recurring charges	Accuracy and completeness of rates and quantity	Inspection	Quantitative
	Verify pro-rated charges	Accuracy and completeness of rate, quantity and date ranges	Inspection	Quantitative
	Verify usage charges	Accuracy and completeness of minutes of use and rates	Inspection	Quantitative
	Verify adjustments	Accuracy, completeness, and timeliness of adjustments	Inspection	Quantitative
	Verify balance carried forward	Accuracy of balance	Inspection	Quantitative
	Verify discounts	Accuracy and appropriateness of discount	Inspection	Quantitative
	Verify late charges	Accuracy of rate and calculation	Inspection	Quantitative
	Receive copy of bill	Timeliness of media delivery	Logging	
Completeness and Readability	Verify presentation of bill sections	Completeness and accuracy	Inspection	Qualitative
	Verify page header information	Completeness and accuracy	Inspection	Qualitative
	Verify presence of Customer Service Record	Completeness	Inspection	Qualitative
	Verify pagination	Completeness and accuracy	Inspection	Qualitative
	Verify presence of return page	Completeness and accuracy	Inspection	Qualitative
	Verify labeling of charges	Completeness and accuracy	Inspection	Qualitative
	Verify service address	Completeness and accuracy	Inspection	Qualitative

## 1.5 Test Approach

Test scenarios will be executed in conjunction with orders issued during the O&P EDI and TAG Functional Evaluations. The following order activity will be included: new installs, conversions from BLS to new LSP "as specified," feature adds/changes, telephone number change, additional line, suspend/restore, inside move, and outside move.

Customer Service Records (CSRs) reflecting completed order activity resulting from test case transactions will be used to create an expectation of billable charges. Expected results will be compared against billing invoices produced by BLS to ensure charges are appropriately and accurately billed. Validation procedures will verify whether recurring and non-recurring charges are rated and applied correctly, pro-rations of charges are calculated appropriately, service establishment and disconnection dates are accurately captured, adjustments and late charges are applied correctly, and balances are carried forwarded appropriately. Bills containing usage charges for billable messages will be examined to verify the accuracy of the usage billing components.

Two bill periods will be processed for the same set of customers. The first bill period will consist of baseline bills created for the test bed telephone numbers. The second bill period will consist of bills produced after select scenarios have been executed. This set will include charges for test case activity such as conversions, additions, and usage charges for calls generated during the execution of the Functional Usage Evaluation.

Billing service delivery media utilized for bill validation purposes will include CD-ROMs, Paper, Diskette Analyzer Bill (DAB) and Billing Data Tape (BDT) formats.

### 1.5.1 Inputs

1. Test scenarios
2. Test case execution
3. Test criteria
4. Detailed test plan
5. Verified baseline bills
6. Test case CSRs
7. Selected usage from Functional Usage Evaluation
8. BLS rate documentation

### 1.5.2 Activities

1. Develop expected results for each test case
2. Validate baseline bills
3. Validate second bill period
4. Record invoice bill date and actual date received

5. Identify discrepancies
6. Compile results

### 1.5.3 Outputs

1. Complete evaluation of all test cases
2. Complete evaluation of BLS bill delivery results
3. Final Report

### 1.6 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

## 2.0 Test BLG8: Resale Usage Functional Evaluation

### 2.1 Description

The Resale Usage Functional Test will evaluate BLS's ability to accurately capture and record usage elements associated with the placement of calls over resale test lines. The test will be executed in conjunction with orders submitted during the execution of the EDI and TAG Functional Evaluations and the CRIS Resale Invoicing Functional Evaluation detailed in Section V, 1.0, Section V, 2.0, and Section VII, 1.0 of this STP.

Test calls will be placed using resale test lines provisioned and configured in accordance with test scenarios. Testers will be provided with test scripts that will encompass a broad variety of call types, destinations, billing options, and call placement procedures (direct dialing, operator assisted, etc.). Testers log all calls and attendant call details such as the call to number, bill to number, origination time, and call duration.

KPMG will examine the accuracy and completeness with which usage messages were captured and recorded, based on a comparison of the call details logged by the testers at the time the usage was generated, and the records contained in the DUFs.

Evaluation of the timeliness of delivery of DUFs will be based on the number of calendar days between the record date (not including the call date) and the date the DUF was created.

### 2.2 Objectives

The objectives of this test are to determine the accuracy, adequacy, and timeliness of all usage types captured on DUFs. The test will evaluate whether all records that should appear actually do appear and records that should not appear are excluded from the file.

### 2.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3

Criteria	Responsible Party
Test bed completed and ready	BLS
Product descriptions and business rules for all transactions to be tested are available	BLS, KPMG
Techniques and instrumentation developed and approved	KPMG
Inter-Connection Agreement obtained from BLS	BLS, KPMG
BLS resources are available to participate in test	BLS
Detailed test plan completed and approved	KPMG

## 2.4 Test Scope

*Table VII-2 Test Target: Usage Processing*

Process Area	Sub Process/Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Reporting of Usage	Track usage	Completeness	Inspection	Quantitative
	Verify usage data	Completeness and accuracy of data	Inspection	Quantitative
	Verify no empty set files	Completeness and accuracy of data	Inspection	Quantitative
Receipt of Usage	Verify Header/Trailer record counts	Completeness of data	Inspection	Quantitative
	Track receipt of files	Timeliness of DUF files and records	Inspection	Quantitative

## 2.5 Test Approach

This transaction-driven evaluation will be based on test calls made by KPMG testers who will be dispatched to various locations within the state of Georgia. One tester will be located outside of Georgia to facilitate the receipt of incoming interstate calls. Test calls will be made using test bed accounts with varying line configurations and services, and which are served from multiple switch types. Calls will be comprised of various types and varying duration as determined by KPMG. Call details will be recorded on Tester Logs and will be compared to DUF records.

Calls will include incoming and outgoing intraLATA, interLATA, and international calls. Calls will be placed using the following methods: direct dial, calling card, full and partial operator assisted collect, third party, interrupts, busy verification, credit requests, as well as calls placed using Phonesmart and Custom Calling features.

DUF transmissions will be examined to ensure header and trailer record count information corresponds with the number of records contained within the file. The date the record was created will be logged and compared to the call origination date to evaluate the timeliness with which the record was created.

### 2.5.1 Inputs

1. Test scenarios

2. Test case execution
3. Test criteria
4. Detailed test plan

#### 2.5.2 Activities

1. Develop Call Matrices, which include test call scripts for each location for each tester
2. Assemble tester resources, provide instructions and dispatch testers to calling locations
3. Complete calls and logs
4. Develop expected results for each test case
5. Verify DUF Header/Trailer counts are correct
6. Record "create date" and age of record
7. Validate DUF records
8. Check for empty set files
9. Identify discrepancies
10. Document findings

#### 2.5.3 Outputs

1. Call Log Report
2. DUF Accuracy and Completeness Report
3. Empty DUF Files Report
4. DUF Timeliness Report
5. Final Report

#### 2.6 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

## VIII. Change Management Test Section

### A. Purpose

The purpose of this section is to define the specific Change Management tests to be undertaken in evaluating the systems and related operational elements affected by BLS's OSS '99 release. Additional evaluations of Change Management methods and procedures related to BLS's OSS are described in *BellSouth - Georgia OSS Evaluation Master Test Plan, Change Management Practices Review (CM-1)*.

### B. Organization

The Change Management "Scope" section contains a table that identifies the types of tests to be associated with the Target Test Area.

The subsequent section, Change Management "Test Process," provides additional information and a table that further define the testing approach, inputs, outputs, as well as entrance and exit criteria.

### C. Scope

This Change Management Test consists of a Target Test Area, the OSS '99 Release Evaluation, representing a significant effort undertaken by BLS to support the CLEC wholesale relationship.

The Target Test Area is further broken down into a number of increasingly discrete Process and Sub Process Areas that serve to identify the particular area of interest under test.

*Table VIII-1 Test Target: OSS '99 Release Evaluation*

Process Area	Sub Process/Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
Change Management: OSS '99 Release Evaluation	Implementing Change	Adequacy and completeness of change implementation process	Inspection Document review Report Review	Qualitative
	Documentation	Adequacy, accuracy, completeness, and timeliness of release documentation	Inspection Document review Report review	Qualitative
	Availability of Functioning Test Environments	Availability of functioning test environments for all supported interfaces	Inspection Document review Report review	Qualitative
	Provision of Support for Interface Testing	Availability and documentation of provision of support for interface testing	Inspection Document review Report review	Qualitative

## D. Test Process

A test process has been designed to address the test target area.

### 1.0 Test CM2: OSS '99 Release Evaluation

#### 1.1 Description

This test evaluates methods and procedures used by BLS to develop and release the OSS '99 applications package and supporting documentation. This test will rely on checklists and inspections.

The OSS '99 applications package includes enhancements to CLEC interfaces that affect the following operational activities:

- Pre-Ordering
- Ordering

#### 1.2 Objectives

The objective of this test is to determine the adequacy and completeness of key BLS processes for developing and releasing system documentation and related support material.

#### 1.3 Entrance Criteria

Criteria	Responsible Party
All global entrance criteria satisfied	See Table III-3
Interview guides/questionnaire developed	KPMG
Interviewees identified and scheduled	BLS, KPMG
Detailed evaluation checklists completed	KPMG

#### 1.4 Test Scope

*Table VIII-2 Test Target: OSS '99 Release Evaluation*

Process Area	Sub Process Attribute	Evaluation Measure	Evaluation Techniques	Criteria Type
Change Management: OSS '99 Release Evaluation	Implementing Change	Adequacy and completeness of change implementation process	Inspection Document review Report Review	Qualitative
	Documentation	Adequacy, accuracy, completeness, and timeliness of release documentation	Inspection Document review Report review	Qualitative
	Availability of Functioning Test Environments	Availability of functioning test environments for all supported interfaces	Inspection Document review Report review	Qualitative



Table VIII-2 Test Target: OSS '99 Release Evaluation

Process Area	Sub Process/ Attribute	Evaluation Measure	Evaluation Technique	Criteria Type
	Provision of Support for Interface Testing	Availability and documentation of provision of support for interface testing	Inspection Document review Report review	Qualitative

### 1.5 Scenarios

This test does not rely on scenarios.

### 1.6 Test Approach

#### 1.6.1 Inputs

1. Electronic Interface Change Control Process (EICCP) documentation
2. Other procedural and technical documentation
3. Evaluation checklists
4. Interview guides

#### 1.6.2 Activities

1. Gather documentation
2. Perform interviews and documentation reviews
3. Complete evaluation checklists and interview summaries
4. Develop and document findings

#### 1.6.3 Outputs

1. Completed evaluation checklists and interview summaries
2. Comparison of actual versus expected results for interface development deliverables (as defined in the Electronic Interface Change Control Process)
3. Summary report

### 1.7 Exit Criteria

Criteria	Responsible Party
Limited to Global Exit Criteria requirements	See Table III-4

## Appendix A: Statistical Approach

### A. Overview

This test will rely on standard statistical methods to evaluate BLS performance. Each test will define the data population to be observed, the measurements to be taken, and the statistical tests to be used. Data will be normalized, tabulated, and archived in a way that allows verification of test results and re-analysis of data using additional statistical methods, if appropriate.

### B. Metrics

The metrics (Service Quality Measurements and generic associated standards) that will serve as parameters for testing are listed in Appendix D-2 in the *BellSouth - Georgia OSS Evaluation Master Test Plan*.

### C. Sampling

In instances where sampling is used, sampling will be designed so that samples are sufficiently representative of populations with respect to the measures being studied to ensure that the resulting statistical inferences made about populations are valid. For most tests, simple random sampling will be used.

### D. Hypothesis Testing

This test will employ a hypothesis testing approach to frame the analysis of test results. The standard "null" hypothesis will be that BLS is meeting the established standard (i.e., performing adequately). The possibility of an error arises if this hypothesis is rejected when the hypothesis is, in fact, true (Type I error) or is accepted when the hypothesis is, in fact, false (Type II error). An attempt will be made to balance Type I and Type II errors as much as is feasible.

### E. Parity Tests and Benchmark Tests

There are two basic types of tests. Parity tests compare a BLS retail average or percentage to a CLEC or test transaction average or percentage. The typical test for this type of comparison is a hypergeometric test for percentages and a two-sample t-test or z-test for averages. For those parity tests where sufficiently large samples can be drawn, hypothesis testing will be done by performing a "z-test" to calculate a "z-score." A z-score is a single number, which indicates the differences between sample data. A low z-score supports the hypothesis of parity (i.e., both CLEC and ILEC performance are from the same "population" in terms of performance). In cases where this test is not appropriate due to small sample size (for tests of averages) or assumption violations, other tests, such as permutation tests, will be performed.

Benchmark tests compare a percentage or average to a fixed standard or benchmark. In this case, the typical test is a binomial test or a one-sample t-test. Once again, alternative statistical tests will be used, where appropriate, based on tests of assumptions and sample sizes.

**F. Results**

Test results will include a summary of the statistics calculated, the hypotheses postulated for the test, and the conclusion(s) drawn based on the statistical results.

## Appendix B: Resale Products for Functional Evaluation

### A. Overview

The January 12, 2000 GAPSC Order specified that BLS should perform testing only of the top 50 retail services available for resale that are electronically orderable and that have not experienced significant commercial usage. The GAPSC required that the STP include the order volumes for these services.

### B. Proposed Products and Services for Evaluation

~~The table below lists the top 50 BLS retail services and features made available for resale, based on number of units in service. The order volume via fax, LENS, TAG, and EDI, where applicable, is presented for each type of service. Products and features that, based on BLS assessment, are ordered by CLECs in volumes that represent significant commercial usage are indicated with an "X." After reviewing the data provided by BellSouth in Exhibits 1 and 3 of the February 7, 2000 BellSouth filing, along with additional requisition type and activity type data requested by KPMG, we are unable to make a recommendation to the Commission on whether the information supports evidence of commercial usage at a service level by interface. KPMG believes our ability to comment on whether or not the data provided by BellSouth is evidence of commercial usage, and an acceptable CLEC experience underlying the generation of the transaction volumes, would require interviews with CLECs and analysis of actual CLEC orders supporting the transaction and in-service unit data.~~

Due to difficulties inherent in this historical data review, KPMG recommends to the Commission, with the concurrence of BellSouth, that all electronically orderable retail services made available for resale be independently tested for pre-ordering, ordering, provisioning, maintenance and repair, and billing, as appropriate.

*(Table to be provided by BellSouth)*

### C. Analysis and Commentary

~~KPMG will conduct an analysis of the order volumes presented in this table to make an independent determination of which products and features it believes have significant commercial usage. In conducting its analysis, KPMG will consider BLS's proposal as well as GAPSC and CLEC comments on the proposal. KPMG's analysis will be provided to BLS and to all parties of record in Docket No. 8354 U, with sufficient period for comment prior to publication of the final STP.~~

**Appendix C: Test Scenarios**

The scenarios listed in this appendix are based on a current understanding of the products and capabilities that are likely to be available at the time the test is executed. Depending on changes in availability, the scenarios may need to be modified before the test begins.

**Resale**

<b>Activity</b>	<b>Res. POTS</b>	<b>Bus. POTS</b>	<b>Res. ISDN -BRI</b>	<b>Bus. ISDN -BRI</b>	<b>PBX</b>	<b>Syn- chronet</b>
Migration from BLS "as is"	X	X	X	X	X	
CLEC to CLEC migration	X	X				
Feature changes to existing customer	X	X				
Migration from BLS "as specified"	X	X	X	X		X
New customer	X	X	X	X	X	X
Telephone number change	X	X				
Directory change	X	X				
Add lines/trunks/ circuits	X	X	X	X	X	
Suspend/restore service	X	X				
Disconnect (full and partial)	X	X	X	X	X	X
Moves (inside and outside)	X	X				
Convert line to ISDN			X	X		
Migrate from CLEC to BLS	X	X				

Note: Scenarios will include variations such as planned errors and supplements to cancel, change an order, or revise due dates.

**xDSL**

<b>Activity</b>	<b>Res. xDSL Capable Loop</b>	<b>Bus. xDSL Capable Loop</b>
Migration from BST to CLEC	X	X
Add new loops to existing customer	X	X
Purchase loops for a new customer	X	X
Disconnect (full and partial)	X	X

Note: Scenarios will be developed to support testing of the SOEG application.